

6GN8

High-Mu Triode— Sharp-Cutoff Pentode

9-PIN MINIATURE TYPE

GENERAL DATA

Electrical:

Heater, for Unipotential Cathodes:

Voltage (AC or DC). $6.3 \pm 10\%$ volts

Current at 6.3 volts. 0.75 amp

Direct Interelectrode Capacitances:^a

Triode Unit:

Grid to plate. 4.4 μf

Grid to cathode and heater. 2.4 μf

Plate to cathode and heater. 0.36 μf

Pentode Unit:

Grid No.1 to plate. 0.1 max. μf

Grid No.1 to cathode & internal shield
& grid No.3, grid No.2, and heater. 11 μf

Plate to cathode & internal shield &
grid No.3, grid No.2, and heater. 4.2 μf

Triode grid to pentode plate. 0.018 max. μf

Pentode grid No.1 to triode plate. 0.005 max. μf

Pentode plate to triode plate. 0.17 max. μf

Characteristics, Class A₁ Amplifier:

	<i>Triode Unit</i>	<i>Pentode Unit</i>	
Plate Supply Voltage.	250	60 200	volts
Grid-No.2 Supply Voltage.	—	150 150	volts
Grid-No.1 Voltage.	—2	0 —	volts
Cathode Resistor.	—	— 100	ohms
Amplification Factor.	100	— —	
Plate Resistance (Approx.).	37000	— 60000	ohms
Transconductance.	2700	— 11500	μmhos
Plate Current.	2	55 ^b 25	ma
Grid-No.2 Current.	—	18 ^b 5.5	ma
Grid-No.1 Voltage (Approx.) for plate $\mu\text{a} = 100$	—	— —10	volts
Grid Voltage (Approx.) for plate $\mu\text{a} = 20$	—5	— —	volts

Mechanical:

Operating Position. Any

Maximum Overall Length. 2-5/8"

Maximum Seated Length. 2-3/8"

Length, Base Seat to Bulb Top (Excluding tip). 2" $\pm$ 3/32"

Diameter. 0.750" to 0.875"

Dimensional Outline. See *General Section*

Bulb. T6-1/2



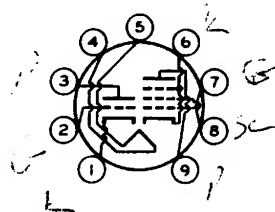
RADIO CORPORATION OF AMERICA
Electron Tube Division
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DATA I
5-61

6GN8

Base. Small-Button Noval 9-Pin (JEDEC No.E9-1)
 Basing Designation for BOTTOM VIEW. 9DX

Pin 1—Triode
 Cathode
 Pin 2—Triode
 Grid
 Pin 3—Triode
 Plate
 Pin 4—Heater
 Pin 5—Heater



Pin 6—Pentode
 Cathode,
 Grid No.3,
 Internal
 Shield
 Pin 7—Pentode
 Grid No.1
 Pin 8—Pentode
 Grid No.2
 Pin 9—Pentode
 Plate

AMPLIFIER — Class A₁

Maximum Ratings, Design-Maximum Values:

	Triode Unit	Pentode Unit	
PLATE VOLTAGE	330 max.	330 max.	volts
GRID-No.2 (SCREEN-GRID) SUPPLY VOLTAGE.	—	330 max.	volts
GRID-No.2 VOLTAGE	—	See <i>Grid-No.2 Input</i> <i>Rating Chart</i> at front of Receiving Tube Section	
GRID-No.1 (CONTROL-GRID) VOLTAGE:			
Positive-bias value	0 max.	0 max.	volts
PLATE DISSIPATION	1 max.	5 max.	watts
GRID-No.2 INPUT:			
For grid-No.2 voltages up to 165 volts	—	1.1 max.	watts
For grid-No.2 voltages between 165 and 330 volts .		See <i>Grid-No.2 Input</i> <i>Rating Chart</i> at front of Receiving Tube Section	
PEAK HEATER-CATHODE VOLTAGE:			
Heater negative with respect to cathode.	200 max.	200 max.	volts
Heater positive with respect to cathode.	200 ^c max.	200 ^c max.	volts

Maximum Circuit Values:

	Triode Unit	Pentode Unit	
Grid-No.1-Circuit Resistance:			
For fixed-bias operation. . .	0.5 max.	0.25 max.	megohm
For cathode-bias operation. .	1 max.	1 max.	megohm

^a Without external shield.

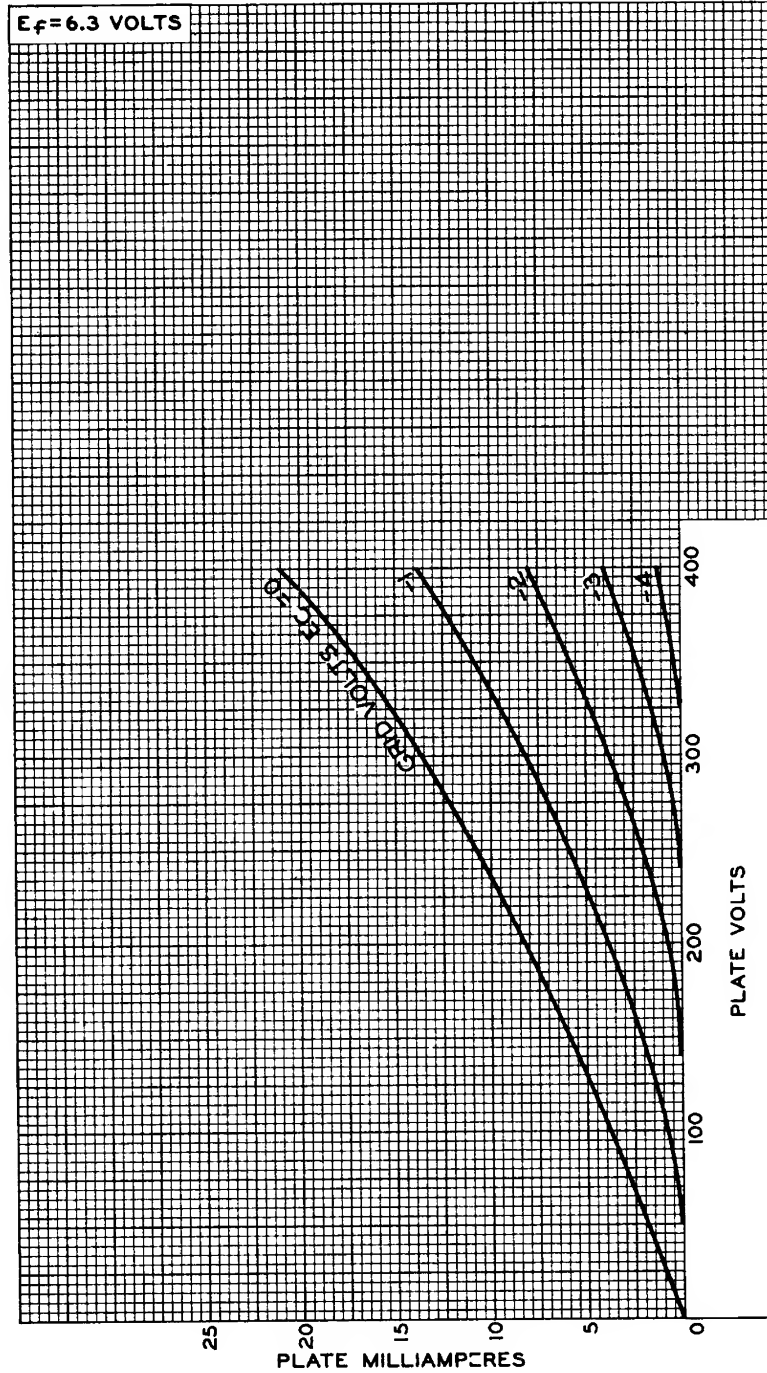
^b This value can be measured by a method involving a recurrent wave form such that the maximum ratings of the tube will not be exceeded.

^c The dc component must not exceed 100 volts.



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AVERAGE PLATE CHARACTERISTICS Triode Unit



92CM-9907R1

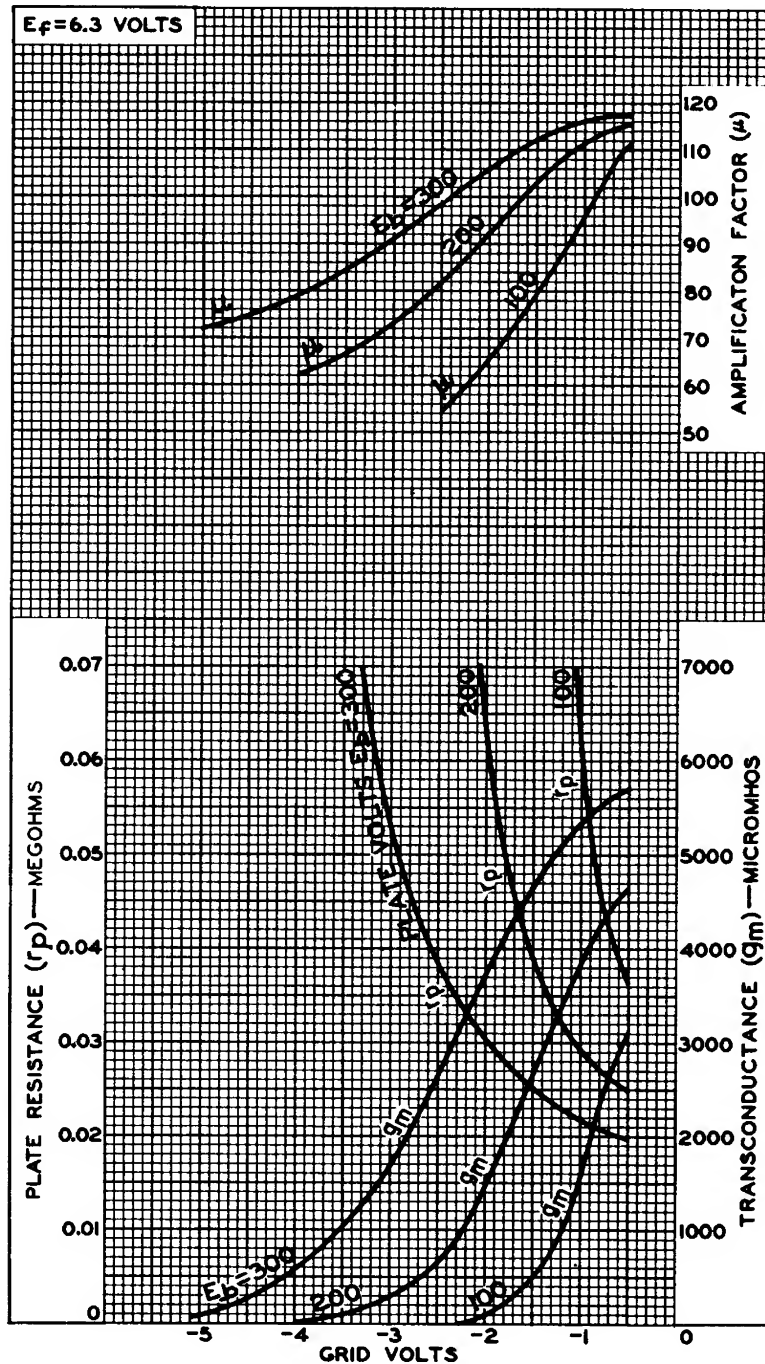


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AVERAGE CHARACTERISTICS Triode Unit



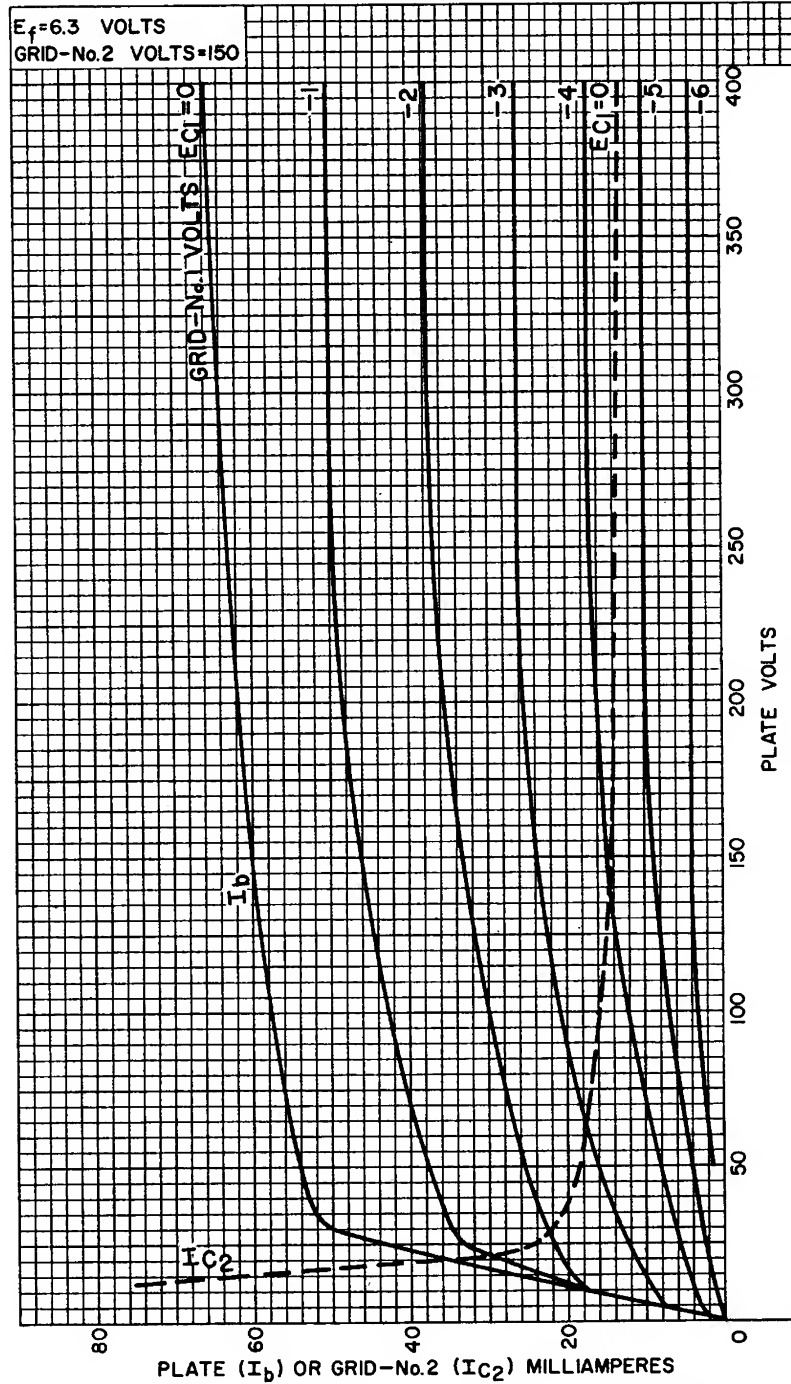
92CM-11025

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AVERAGE CHARACTERISTICS Pentode Unit



92CM-11021

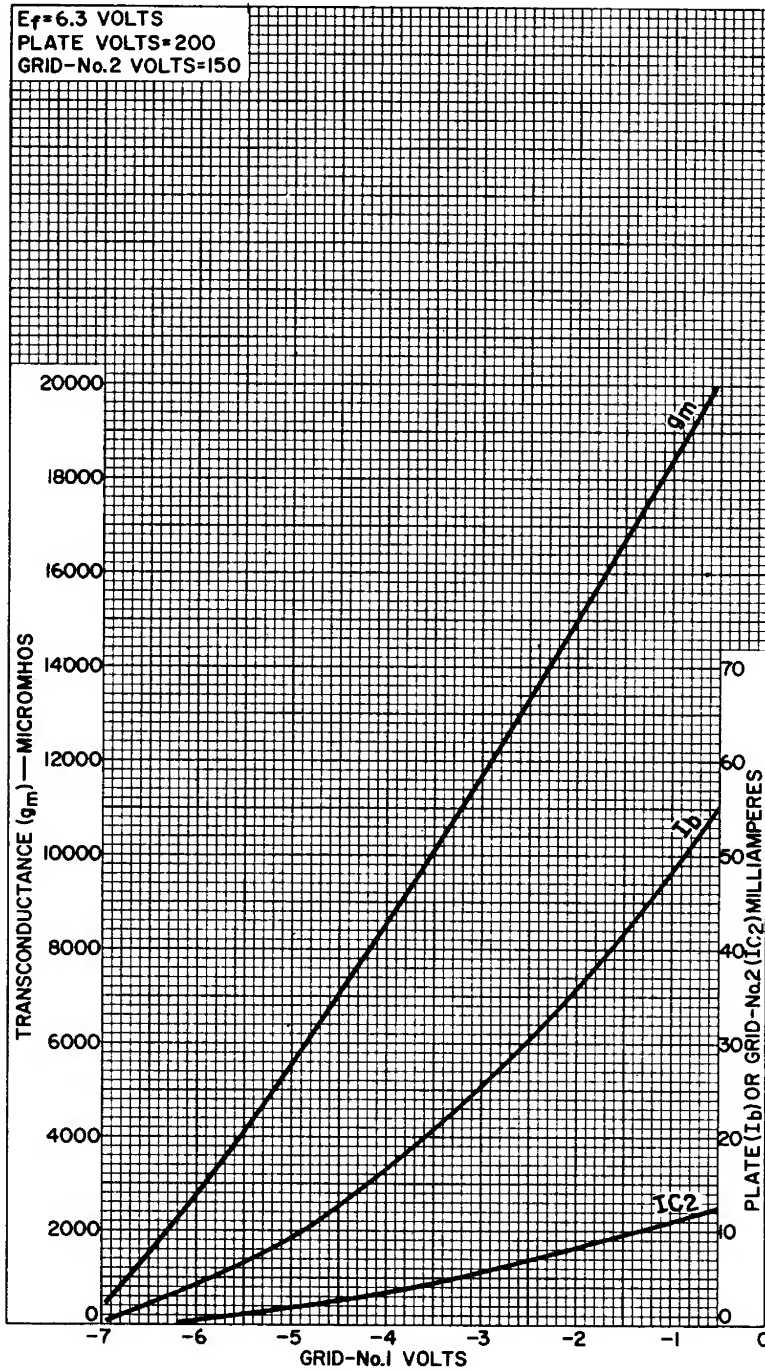


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DATA 3
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AVERAGE CHARACTERISTICS Pentode Unit



92CM-11022

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